CLAIMS

1. A method of treating a bodily vessel comprising the steps of:

inserting a catheter having a distal portion into a body vessel;

advancing the distal portion to a desired location in a bodily vessel; and

delivering heat to the location by a variety of means.

2. The method of claim 1 wherein at least a portion of the distal end of the catheter includes a stent disposed thereabout.

3. The method of claim 2 further comprising the step of delivering the stent.

4. The method of claim 3 wherein the heated contrast agent is delivered to the distal end after the stent is delivered.

5. The method of claim 3 wherein the heated contrast agent is delivered to the distal end as the stent is delivered.

6. A method of treating a bodily vessel comprising the steps of:

advancing a stent delivery catheter comprising a stent to a desired location in a bodily vessel; implanting the stent in the bodily vessel at the desired location; and heating the bodily vessel at the desired location.

7. The method of claim 6 wherein the bodily vessel is inductively heated by directing energy to a portion of the catheter.

8. The method of claim 6 wherein the bodily vessel is inductively heated by directing energy to at least a portion of the stent.

9. The method of claim 6 wherein the bodily vessel is inductively heated by directing an RF electromagnetic field to the desired location.

10. The method of claim 6 wherein the bodily vessel is inductively heated at the desired location after the stent is implanted.

11. The method of claim 6 wherein the bodily vessel is inductively heated at the desired location as the stent is implanted.

12. The method of claim 6 wherein the bodily vessel is inductively heated at the desired location immediately before the stent is implanted.

13. A method of treating a bodily vessel comprising the steps of:

delivering a stent to a desired location in a bodily vessel;

implanting the stent in the bodily vessel at the desired location; and

heating the stent at the desired location.

14. The method of claim 13 wherein the stent is ultrasonically heated.

15. The method of claim 14 wherein the bodily vessel is ultrasonically heated at the desired location after the stent is implanted.

16. The method of claim 14 wherein the bodily vessel is ultrasonically heated at the desired location as the stent is implanted.

17. The method of claim 10 wherein the bodily vessel is ultrasonically heated at the desired location immediately before the stent is implanted.

18. A stent delivery apparatus comprising:

a catheter having a distal region and an ultrasonic transducer element positioned within the distal region, the ultrasonic transducer element constructed and arranged to generate ultrasonic waves.

19. The stent delivery apparatus of claim 18 further comprising a stent, the stent being disposed about at least a portion of the distal region of the catheter.

20. A stent delivery apparatus comprising:

a catheter having a distal region;

a stent, the stent disposed about at least a portion of the distal region;

a resistive metal element positioned in proximity with the stent; and

a source of electricity in electrical communication with the metal element.

21. A stent delivery apparatus comprising:

a catheter having a distal region;

a stent, the stent disposed about at least a portion of the distal region;

a magnetic wave absorbing moiety in the vicinity of the stent; and

a source of radio frequency waves absorbable by the magnetic wave absorbing moiety.

22. A method of treating a bodily vessel comprising the steps of:

inserting a catheter into a bodily vessel;

advancing a distal portion of the catheter to a desired location within the bodily vessel;

delivering a magnetic medium to the distal portion of the catheter; and

inductively heating the magnetic medium.

23. The method of claim 22 wherein a stent is at least partially disposed about the distal portion of the catheter.

24. The method of claim 23 further comprising the steps of delivering the stent to the desired location.

25. The method of claim 24 wherein the magnetic medium is inductively heated as the stent is implanted.

26. The method of claim 24 wherein the magnetic medium is inductively heated after the stent is implanted.

27. The method of claim 24 wherein the magnetic medium is inductively heated before the stent is implanted.

28. The method of claim 24 wherein the magnetic medium forms a portion of the catheter.

29. The method of claim 22 wherein the magnetic medium is inductively heated by application of radio frequency electromagnetic energy thereto.